

## Heat Soaking

The concept of heat soaking glass is to reduce or eliminate spontaneous breakage due to stone inclusions. Heat soaking involves exposing the tempered glass to elevated temperatures for some period of time.

The obvious objective of the heat soak process is to achieve a “break now, not later”. This is based on the assumption that any glass with inclusions will break during the heat soak process.



\* CSG Heat Soak Tempered Glass offers 10 years warranty. Terms and conditions apply

There are several facts to keep in mind about nickel sulphide and its role in glass breakage:

1. Spontaneous breakage caused by nickel-sulphide stones occurs only in tempered glass, not in annealed or heat-strengthened glass.
2. There is no known technology that completely eliminates the possible formation of nickel sulphide stones in float glass. Since nickel sulphide stones are so small, there is no practical way to inspect their presence in float glass.
3. Heat soaking after fabrication may destroy some flawed glass panels, but the procedure does not guarantee 100 percent elimination of nickel sulphide inclusions. In addition, the heat soaking procedure can increase costs, cycle times and scrap rates.

## Heat Soak Process Cycle

The heat soak process cycle consists of a heating phase, a holding phase and a cooling phase (see Figure 1).

